

PATENT SPECIFICATION

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DRAWINGS ATTACHED.

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COMPLETE SPECIFICATION.

Bag or Case of Plastics Foil.

We, NEOPLASTIK BRAUNSCHWEIGER KUNSTSTOFFWERK G.M.B.H., of 1, Marienberger Strasse, 33 Braunschweig, West Germany, a German Body Corporate, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a bag or case made from a plastics foil and provided with a carrying strap, and to a method of manufacturing such bag.

It is an object of the invention to provide a bag or case in which either the carrying strap is formed from material cut from the bag body and produced in the same operation, or is separately formed and connected to the bag body during the operation of forming said body.

According to the invention there is provided a bag or case comprising a body having a mouth and a carrying strap, both the body and the strap being made from identical plastics foil, wherein the strap consists of a strip or strips extending along the bag mouth to the ends thereof, the or each strip having its ends secured by welding or by an adhesive to the bag at the ends of the mouth.

The invention also provides a method of manufacturing the bag or case defined above. One form of such method comprises forming an indented fold in each of the narrow edges of a tubular plastics foil of elongated cross-section, one of said folded edges forming the bottom of the bag, cutting away a portion of the other folded edge to form the bag mouth and provide a strip forming a carrying strap, and simultaneously closing the ends of the tubular foil by welding or by an adhesive and securing end portions of said strip to the closed ends of the tubular foil.

[Price 4s. 6d.]

Another form of such method comprises locating a strip of plastics foil along one narrow edge of a tubular plastics foil of elongated cross-section, the other narrow edge of said tubular foil forming the bottom of the bag, slitting said one narrow edge to form the bag mouth, and simultaneously closing the ends of the tubular foil by welding or by an adhesive to form the ends of the bag and securing the ends of the strip to the closed ends of the tubular foil.

The invention is illustrated by way of example in the single Figure of the accompanying drawing, which shows an opened bag in perspective view.

The body 1 of the bag or case is formed from a length of tubular plastics foil of elongated cross-section arranged with its axis horizontal and with the narrower side portions at the top and bottom respectively. The bottom edge of the tube is inwardly indented lengthwise to form the bottom 2 of the bag, said indented bottom being folded when the bag is laid flat but being extended as shown in the Figure when the bag is opened out. The top edge of the tube is cut lengthwise to form the mouth of the bag. The two vertical ends of the tube are folded inwardly and are welded or attached by an adhesive as shown at 4 and 5 to form the ends of the bag, and these ends can be folded along the weld lines when the bag is laid flat.

The bag shown is provided with a carrying strap which extends from the ends of the bag in the region of the mouth. The strap 3 can be made from the bag body by forming it from the upper narrow edge of the tube, and in this construction said upper narrow edge is longitudinally indented similarly to the lower edge and the ends of the indented fold are secured to the welds 4, 5. The mouth cut is here effected at such a distance below the top of the indented upper fold as to leave a

depending strip of U-shaped cross section along the open mouth of the bag, said strip being of a width such as to extend over the width of the bag when the latter is laid flat. When, as is illustrated, the bag is opened out for filling, the two ends are stretched flat and the carrying strap 3 is opened out into the V-shaped form shown.

Instead of forming the carrying strap from a U-shaped strip produced from an upper indented edge of the tube as described above, the strap may be produced separately from the bag body and secured to the bag ends by welding or by an adhesive. In this arrangement the end portions of the strap are folded downwardly so as to be securable either internally or externally to be ends of the bag body. As in the first embodiment, the strap is made from a strip of plastics foil identical with the foil used in the production of the bag body. More than one strip may be used in the production of the carrying strap.

The length of tubular plastics foil used in the production of a bag may be cut from extruded tubular stock fed to the individual processing stations of a production position so that a continuous supply of bags may be produced from successively cut lengths of stock. Where the carrying straps are not formed from parts cut from the bag bodies, these straps can be cut, simultaneously with the cutting of the tube lengths, from strip stock extending along the upper narrow edge of the tube stock either interiorly or exteriorly of the latter and advanced with the tube stock. The formation of the carrying strap from the bag body or the attachment of a separate strap or straps to the body can be effected without the need for any additional production steps.

A bag or case according to the invention has the advantage over hitherto known plastics foil bags that the carrying strap does not form a projecting part when the bag is laid flat and thus does not interfere with the flat stacking of bags one on another.

WHAT WE CLAIM IS:—

1. A bag or case comprising a body having a mouth and a carrying strap, both the body and the strap being made from identical plastics foil, wherein the strap

consists of a strip or strips extending along the bag mouth to the ends thereof, the or each strip having its ends secured by welding or by an adhesive to the bag at the ends of the mouth.

2. A method of manufacturing the bag claimed in Claim 1, which comprises forming an indented fold in each of the narrow edges of a tubular plastics foil of elongated cross-section, one of said folded edges forming the bottom of the bag, cutting away a portion of the other folded edge to form the bag mouth and provide a strip forming a carrying strap, and simultaneously closing the ends of the tubular foil by welding or by an adhesive and securing end portions of said strip to the closed ends of the tubular foil.

3. A method of manufacturing the bag claimed in Claim 1, which comprises locating a strip of plastics foil along one narrow edge of a tubular plastics foil of elongated cross-section, the other narrow edge of said tubular foil forming the bottom of the bag, slitting said one narrow edge to form the bag mouth, and simultaneously closing the ends of the tubular foil by welding or by an adhesive to form the ends of the bag and securing the ends of the strip to the closed ends of the tubular foil.

4. A method as claimed in Claim 2 or 3, wherein the tubular plastics foil is cut from extruded tubular stock.

5. A method as claimed in Claim 2, 3 or 4, wherein the strip is located internally of the tubular foil.

6. A method as claimed in Claim 2, 3 or 4, wherein the strip is located externally of the tubular foil.

7. A method as claimed in any one of Claims 3 to 6, wherein two strips are employed to provide two carrying straps.

8. A bag or case substantially as described with reference to and as illustrated in the accompanying drawing.

9. Method of manufacturing the bag claimed in Claim 1 substantially as described.

For the Applicants:—
MATTHEWS, HADDAN & CO.,
Chartered Patent Agents,
31—32 Bedford Street,
Strand, London, W.C.2.

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COMPLETE SPECIFICATION

1-SHEET

*This drawing is a reproduction of
the Original on a reduced scale*

